

**Abstract**

A packaging laminate (10) including a substrate film (15) coated with a carbon containing silicon oxide layer (16, 17) on both surfaces is disclosed herein.

- 5 A method for producing the laminate (10), and blanks and packages fabricated from the laminate are also disclosed herein. The PECVD process of the present invention strains the substrate film (15) during deposition thereby creating a very thin oxide layer with superior durability, oxygen and aroma barrier properties. The carbon-containing silicon oxide coating (16, 17) has a stoichiometry of  $\text{SiO}_x\text{C}_y$  in which x is within the range of 1.5-2.2 and y is within the range of 0.15-0.80. The
- 10 substrate film (15) may include a core layer (12) of a material selected from the group consisting of paper, paperboard, a foamed core, polyethylene terephthalate, polyamide, polyethylene and polypropylene.

- 15 Publication figure: Fig 5